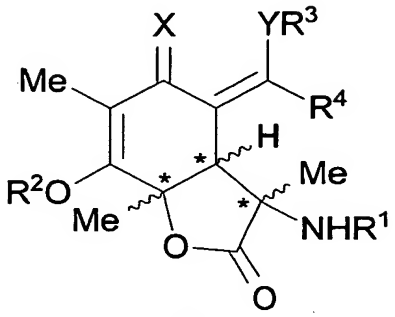
Patent claims

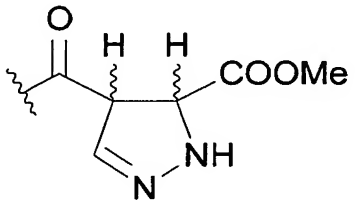
1. Compound of the general formula (2):



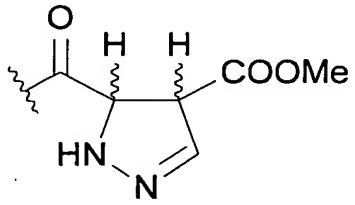
(2)

wherein

R^1 is selected from: –H, (C_1-C_{10})-alkyl, wherein alkyl is straight or branched, (C_3-C_{10})-alkenyl, or an acyl group (e.g. formyl, acetyl, trichloroacetyl, fumaryl, maleyl, succinyl etc.), wherein eventual free –COOH-groups also can be present on this acyl group in the form of esters (e.g. a methyl ester, –COOMe), or, optionally, R^1 can also be one of both heterocyclic acyl substituents (3) or (4)



(3)



(4)

;

R^2 is selected from: –H, (C_1-C_{10})-alkyl, wherein alkyl is straight or branched, or an acyl group (e.g. formyl, acetyl etc.);

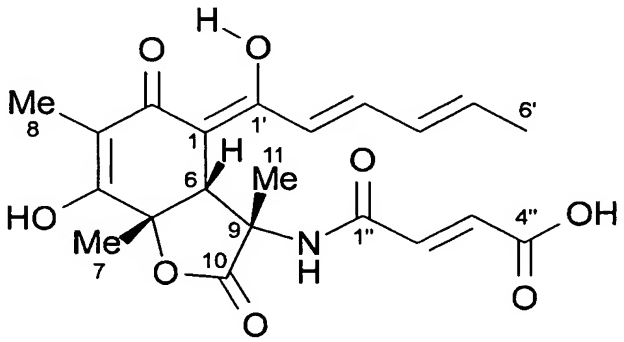
R^3 is selected from: –H, (C_1-C_{10})-alkyl, wherein alkyl is straight or branched, or an acyl group (e.g. formyl, acetyl etc.);

R^4 is selected from: (C_1-C_{10})-alkyl, wherein alkyl is straight or branched, or (C_3-C_{10})-alkenyl, wherein the alkenyl residue can contain either one or several double bonds;

X is selected from O, S, NOH or NOR^5, wherein R^5 is a straight chain or branched chain (C_1-C_6)-alkyl;

Y is either O or Y, and X are N-atoms that bound to each other, thus forming a pyrazole ring; and wherein the compound can be present as (*R*,*R*,*R*)-, (*R*,*R*,*S*)-, (*R*,*S*,*R*)-, (*R*,*S*,*S*)-, (*S*,*R*,*R*)-, (*S*,*R*,*S*)-, (*S*,*S*,*R*)- and (*S*,*S*,*S*)-stereo isomer, and pharmaceutically acceptable salts or solvates of (2).

2. Compound according to claim 1 having the formula (1):



(1)

(sorbicillacton A) or derivatives thereof, their diastereomers, as well as the corresponding enantiomers, and pharmaceutically acceptable salts or solvates of this compound.

3. Method for the production of a compound according to claim 1 or 2, comprising growing a fungus of the genus *Penicillium*, in particular *Penicillium chrysogenum*, in a know fashion, and isolating of at least one compound according to the invention from the culture medium and/or the fungal biomass.

4. Method according to claim 3, characterised in that the growing of the fungus takes place in a marine organism, in particular the marine sponge *Ircinia fasciculata* (porifera).

5. Method according to claim 3 or 4, further comprising a subsequent synthetic derivatisation of the isolated compound.

6. Method for the biomimetic synthesis of a compound according to claim 1 or 2, comprising

a) providing of sorbicillin and/or derivatives thereof,

b) oxidative dearomatisation and subsequent addition of alanin or other amino acids

and their analogues, and

c) subsequent attachment of fumaric acid or analogous acyl residues.

7. Compound according to claim 1 or 2 for the use for the treatment of diseases.

8. Pharmaceutical composition, comprising a compound according to claim 1 or 2, together with suitable excipients or additives.

9. Pharmaceutical composition according to claim 8, characterised in that the compound is present in the form of a depot substance or as a precursor, together with a suitable, pharmaceutically acceptable diluent or carrier substance.

10. Pharmaceutical composition according to claim 8 or 9, characterised in that the compound is present in an amount of 20 µg.

11. Pharmaceutical composition according to claim 8 or 9, characterised in that the compound is present in an amount such that a concentration range of between 0.3 and 3.0 µg/ml is present at a treatment *in vivo*.

12. Pharmaceutical composition according to any of claims 8 to 11, characterised in that it contains further chemotherapeuticals.

13. Pharmaceutical composition according to any of claims 8 to 12 in the form of tablets, dragées, capsules, droplets, suppositories, preparations for injection or infusion for peroral, rectal or parenteral use.

14. Use of a compound according to claim 1 or 2 for the production of a medicament for the treatment of tumour and/or viral diseases and/or for the treatment of inflammatory conditions.

15. Use according to claim 14 in the form of a depot substance or as a precursor, together with a suitable, pharmaceutically acceptable diluent or carrier substance.

16. Use according to claim 14 or 15 for the treatment of HIV-1 in a concentration range of

between 0.3 and 3.0 µg/ml.

17. Use according to claim 14 or 15 for the treatment of inflammations in a concentration of 2 µg/ml.

18. Use according to claim 14 or 15 for the treatment of formation of oedema in an amount of 20 µg.

19. Method for the treatment of a disease selected from tumour and/or viral diseases and/or inflammatory conditions, comprising administering a compound according to claim 1 or 2 or a pharmaceutical composition according to claim 8 to 13.

20. Method according to claim 19, comprising administering of the pharmaceutical composition in the form a depot substance or as a precursor, together with a suitable, pharmaceutically acceptable diluent or carrier substance.

21. Method according to claim 19 or 20, wherein the viral disease is HIV-1, and the compound is administered in a concentration range of between 0.3 and 3.,0 µg/ml.

22. Method according to claim 19 or 20, wherein an inflammation is treated, and the compound is administered in a concentration of 2 µg/ml.

23. Method according to any of claims 19 to 22, wherein the formation of oedema is treated, and the compound is administered in an amount of 20 µg.